

CLAIMS

What is claimed is:

1. A monitoring system, comprising:

one or more monitoring tags wherein each monitoring tag emits an identifier signal unique to each monitoring tag;

one or more monitoring sensors wherein one or more of the monitoring sensors receive signals from the one or more monitoring tags and relay the signals to one or more monitoring stations; and

one or more monitoring stations wherein the one or more monitoring stations log and display information associated with the signals received from the one or more monitoring sensors.

2. The monitoring system of claim 1, wherein at least one monitoring station identifies a situation based on the received signal.

3. The monitoring system of claim 1, wherein at least one monitoring station displays a floor plan of a monitored area.

4. The monitoring system of claim 2, wherein at least one monitoring station displays an alert icon on a floor plan based on the situation.

5. The monitoring system of claim 2, wherein at least one monitoring station sounds an audible alert based on the situation.

6. The monitoring system of claim 2, wherein at least one monitoring station sends an email based on the situation.
7. The monitoring system of claim 1, wherein the monitoring tags are attached to people.
8. The monitoring system of claim 1, wherein the monitoring tags are attached to items.
9. The monitoring system of claim 1, wherein each monitoring tag has a means for connecting and an alert signal is emitted by the monitoring tag when the means for connecting is broken.
10. The monitoring system of claim 1, wherein one or more monitoring sensors are proximity sensors.
11. The monitoring system of claim 1, wherein the monitoring tag comprises a connecting strap with a closed circuit and emits an alert signal when the strap is broken and the circuit is opened.
12. The monitoring system of claim 11, wherein the closed circuit encircles an extremity of a person being monitored.
13. The monitoring system of claim 1, wherein each monitoring tag has a connecting means and an alert signal is emitted when the connecting means is disconnected.

14. The monitoring system of claim 1, wherein the one or more monitoring stations uses the identifier signal to search a monitoring tag database for additional information and displays the additional information relating to the specific identifier signal.

15. The monitoring system of claim 1, further comprising:

one or more door locks wherein at least one monitoring station activates the one or more door locks.

16. The monitoring system of claim 15, wherein at least one monitoring station activates one or more of the door locks based on at least one monitoring sensor receiving the one or more identifier signals.

17. The monitoring system of claim 15, wherein at least one monitoring station uses the one or more identifier signals to search a monitoring tag database for additional information and activates one or more of the door locks based on the additional information.

18. The monitoring system of claim 1, wherein the one or more monitoring stations communicate with each other over an existing local area network.

19. The monitoring system of claim 1, wherein one of the one or more monitoring stations is a monitoring station server that coordinates the monitoring system's activities with the other one or more monitoring stations.

20. A monitoring system, comprising:

one or more means for identifying wherein each means for identifying emits an identifier signal unique to each means for identifying;

one or more means for sensing wherein one or more of the means for sensing receives signals from the one or more means for identifying and relays the signals to one or more means for monitoring; and

one or more means for monitoring wherein at least one means for monitoring logs and displays data associated with the signals received from the one or more means for monitoring.

21. The monitoring system of claim 20, wherein at least one means for monitoring displays a floor plan of a monitored area.

22. The monitoring system of claim 20, wherein at least one means for monitoring displays an alert icon on a floor plan.

23. The monitoring system of claim 20, wherein at least one means for monitoring sounds an audible alert.

24. The monitoring system of claim 20, wherein at least one means for monitoring sends an email.

25. The monitoring system of claim 20, wherein the means for identifying are attached to people.

26. The monitoring system of claim 20, wherein the means for identifying are attached to items.

27. The monitoring system of claim 20, wherein each means for identifying has a means for connecting and an alert signal is emitted when the means for connecting is broken.

28. The monitoring system of claim 20, wherein each means for identifying has a means for connecting and an alert signal is emitted when the means for connecting is disconnected.

29. The monitoring system of claim 20, wherein at least one means for monitoring uses the identifier signal to search a monitoring tag database for additional information and displays the additional information relating to the specific identifier signal.

30. The monitoring system of claim 20, further comprising:

one or more means for locking wherein at least one means for monitoring activates at least one means for locking.

31. The monitoring system of claim 30, wherein at least one means for monitoring activates one or more of the means for locking based on the one or more of the means for sensing receiving the one or more identifier signals.

32. The monitoring system of claim 30, wherein the one or more means for monitoring uses the one or more identifier signals to search a monitoring tag information database and activates one or more of the means for locking based on the additional information.

33. A Graphical User Interface (GUI) for a monitoring system, comprising:

a map associated with a monitored area;

one or more monitoring sensor icons located on the map in a location associated with a monitoring sensor in the monitored area; and

one or more event icons located on the map in a location associated with a monitored event in the monitored area.

34. The GUI of claim 33, wherein the one or more event icons also display a text description associated with a specific event.

35. The GUI of claim 33, further comprising one or more door monitoring icons located on the map in a location associated with a door monitor in the monitored area.

36. The GUI of claim 35, wherein the one or more door monitoring icons also displays a text description associated with a door event.

37. The GUI of claim 35, wherein the one or more door monitoring icons are displayed after one or more of the following events: a door is left ajar, an attempt is made to open a locked door, a door is opened, an individual is loitering near a door, or a battery is low for a door sensor.

38. The GUI of claim 33, further comprising:

one or more overlay regions on the floor plan each surrounding the one or more monitoring sensor icons wherein the one or more overlay regions are associated with areas monitored by the one or more monitoring sensors in the monitored area.

39. The GUI of claim 38, wherein the overlay regions change color in response to a status change.

40. The GUI of claim 33, wherein the one or more monitoring sensor icons change color in response to a maintenance problem.

41. The GUI of claim 33, further comprising:

an alert bar that displays information about a status change.

42. The GUI of claim 33, further comprising:

a status log that displays information about prior status changes.

43. The GUI of claim 33, further comprising:

a tool bar with drop down menus for accessing controls.

44. The GUI of claim 33, further comprising:

operating buttons for accessing software controls.

45. The GUI of claim 33, wherein the map and event icons always remain visible.
46. The GUI of claim 33, wherein a user can access any task within two mouse clicks.
47. The GUI of claim 33, wherein the map is constructed by a user.
48. A method of monitoring, comprising:
 - receiving a unique identifier signal from each of one or more monitoring tags;
 - receiving an alert signal from one or more monitoring tags;
 - identifying a situation based on one of the identifier signals and the alert signal; and
 - storing and displaying information about the situation.
49. The monitoring method of claim 48, further comprising:
 - displaying a floor plan of a monitored area.
50. The monitoring method of claim 49, further comprising:
 - displaying an alert icon on a floor plan associated with the situation.
51. The monitoring method of claim 48, further comprising:
 - sounding an audible alert associated with the situation.

52. The monitoring method of claim 48, further comprising:

 sending an email associated with the situation.

53. The monitoring method of claim 48, further comprising:

 using the identifier signal to search a monitoring tag database for additional information relating to the specific identifier signal.

54. The monitoring method of claim 48, further comprising:

 activating one or more door locks in response to the situation.

55. The monitoring method of claim 53, further comprising:

 activating one or more door locks in response to the additional information retrieved from the monitoring tag database.

56. A computer program product, tangibly embodied in an information carrier, for a monitoring system, the computer program product being operable to cause a machine to:

 receive a unique identifier signal from each of one or more monitoring tags;

 receive an alert signal from one or more monitoring tags;

 identify a situation based on one of the identifier signals and the alert signal; and

 store and display the situation.

57. The computer program product of claim 56, further being operable to cause a machine to:
display a floor plan of a monitored area.

58. The computer program product of claim 57, further being operable to cause a machine to:
display an alert icon on a floor plan associated with the situation.

59. The computer program product of claim 56, further being operable to cause a machine to:
sound an audible alert associated with the situation.

60. The computer program product of claim 56, further being operable to cause a machine to:
send an email associated with the situation.

61. The computer program product of claim 56, further being operable to cause a machine to:
use the identifier signal to search a monitoring tag database for additional information
relating to the specific identifier signal.

62. The computer program product of claim 56, further being operable to cause a machine to:
activate one or more door locks in response to the situation.

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62. The computer program product of claim 61, further being operable to cause a machine to:
activate one or more door locks in response to the additional information.

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63. A computer program product, tangibly embodied in an information carrier, for a monitoring system, the computer program product being operable to cause a machine to display:

- a map associated with a monitored area;
- one or more monitoring sensor icons located on the map in a location associated with a monitoring sensor in the monitored area; and
- one or more event icons located on the map in a location associated with a monitored event in the monitored area.

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64. The computer program product of claim 63, further being operable to cause a machine to display, wherein the one or more event icons also displays a text description associated with a specific event.

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65. The computer program product of claim 63, further being operable to cause a machine to display:

- one or more door monitoring icons located on the map in a location associated with a door monitor in the monitored area.

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66. The computer program product of claim 65, further being operable to cause a machine to display, wherein the one or more door monitoring icons also displays a text description associated with a door event.

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67. The computer program product of claim 65, further being operable to cause a machine to display, wherein the one or more door monitoring icons are displayed after one or more of the

following events: a door is left ajar, an attempt is made to open a locked door, a door is opened, an individual is loitering near a door, or a battery is low for a door sensor.

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68. The computer program product of claim 63, further being operable to cause a machine to display:

one or more overlay regions on the map each surrounding the one or more monitoring sensor icons wherein the one or more overlay regions are associated with areas monitored by the one or more monitoring sensors in the monitored area.

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69. The computer program product of claim 68, further being operable to cause a machine to display, wherein the overlay regions change color in response to a status change.

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70. The computer program product of claim 63, further being operable to cause a machine to display, wherein the one or more monitoring sensor icons changes color in response to a maintenance problem.

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71. The computer program product of claim 63, further being operable to cause a machine to display:

an alert bar that displays information about a status change.

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72. The computer program product of claim 63, further being operable to cause a machine to display:

a status log that displays information about prior status changes.

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73. The computer program product of claim 63, further being operable to cause a machine to display:

a tool bar with drop down menus for accessing controls.

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74. The computer program product of claim 63, further being operable to cause a machine to display:

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operating buttons for accessing software controls.

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75. The computer program product of claim 63, further being operable to cause a machine to display, wherein the map and event icons always remain visible.

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76. The computer program product of claim 63, further being operable to cause a machine to display, wherein a user can access any task within two mouse clicks.

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73. The computer program product of claim 63, further being operable to cause a machine to display, wherein the map is constructed by a user during installation.